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Office Memorandum • INFORMATION • UNITED STATES GOVERNMENT

TO : Acting Chief, TG/80
THRU: Reports Control/SO
FROM : Acting Chief, Information Branch/SI

DATE: 7 March 1952

SUBJECT: Advertising Material - Dr. Frank Fruengel, Physikalisch
Technische Laboratorium GmbH, DAS #1424

Reference: Your Memo No. 1298

1. Attached are documents totaling thirteen pages, which describe items a and c of paragraph 1, of the reference and evaluations on each totaling two pages.

2. Information in the document presented on the Fluophon II item b of paragraph 1 of the reference, is too meager to properly evaluate the apparatus from a physics standpoint. Therefore, this document totaling three pages is being forwarded to the Chemistry Division for any possible comments on the use of the instrument.

3. Due to the long period of time that has been required to process this case to its present status, we have asked the Chemistry Division to complete their evaluation by 18 March 1952.

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Enclosures

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DECLASSIFIED AND RELEASED BY
CENTRAL INTELLIGENCE AGENCY
SOURCE METHOD EXEMPTION 3B2B
NAZI WAR CRIMES DISCLOSURE ACT
DATE 2008

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SECURITY INFORMATION

Gross-Strobskop
(Large Stroboscope)

The advertising material gives considerable data on performance of the instrument but little on its construction so that its performance limitations can not be checked.

Presuming that the performance data can be substantiated, the stroboscope is quite versatile, and perhaps more versatile than the usual laboratory stroboscope on the market. It is doubtful that a single instrument would be satisfactory for ballistic measurements. The speed and intensity of an individual flash, one microsecond, would probably be adequate for single picture ballistic photography, but for sequence of pictures usually required in such studies, this equipment would be far too slow and the intensity of the flash would have dropped to a low level. For example,

A projectile moving at 4000 ft/sec would travel only about .05" in one microsecond; but, between flashes (rated at 20,000/minute or 333/second the instruments highest rating), the projectile would have traveled 13 feet and probably be out of the field of view. At that rapidity of sequential flashes, the intensity would drop down to about 1/20th of the individual flash value.

It is entirely possible that a series of these stroboscope flash units might be triggered to operate in very rapid sequence, as done in usual ballistic measurements, but this would require other mechanisms of very intricate design and special photographic equipment not ordinarily available, usually of special laboratory design. The manufacturer makes no claims in the field of ballistics.

No reasons are seen for controlling the shipments of the type of instrument, for the performance limitations are clearly within the easy range of general scientific knowledge.

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SECURITY INFORMATION

Isolex High-Voltage Insulation Tester

This advertisement tells about the use of this equipment but nothing of its design and construction so that no exact evaluation of its merits can be made.

Assuming that it can perform as advertised, the device is a useful tool for testing insulation and locating volts. It is not considered to go beyond the limits of general technical knowledge but apparently has some design features not disclosed which make the equipment unique and which are probably the basis for patent application. These features would require disclosure before a complete evaluation can be made.

However, no reason is seen why there should be any prohibition on the export of this type of equipment.

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